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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,839	08/25/2003	Bruno Rijsman	1014-066US01/JNP-0313	2879

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EXAMINER	
NGUYEN, HANH N	
ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
11/28/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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TH

Office Action Summary	Application No.	Applicant(s)	
	10/647,839	RIJSMAN, BRUNO	
	Examiner	Art Unit	
	Hanh Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Response filed 9/12/07*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-16,18,19,21-27,32-37,39,40,42-44,46-51,53 and 54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-16,18,19,21-27,32-37,39,40,42-44,46-51,53 and 54* is/are rejected.

7)☒ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-6, 8-16, 18, 19, 21-27, 32-37, 39, 40, 42-51, 53 and 54 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 8-16, 18, 19, 21-27, 32-37, 39, 40, 42-44, 46-51, 53 and 54 are rejected under 35 USC 103(a) as being unpatentable over Ho et al. (US Pat. 6,910,148 B1) in view of Dinker et al. (US pat. 7,206,836 B2).

In claims 1, 8, 10, 22, 32, 39, 42 and 54, Ho et al. discloses a method comprising establishing a routing communication session (see fig.1; col.6, lines 10-20; router 104 maintains consistent routing protocol information with neighbor nodes) in accordance with a routing protocol (see col.7, lines 35-45; fig.2; routing protocols 220 OSPF, IS-IS, RIP and BGP) between a primary routing control unit (fig.1; col.6, lines 20-25; active controller 910) of a first router (router 104; fig.1) and a second router (peer nodes 102A and 102B), wherein the routing communication session is established to have a first restart time in the event of a session failure (col.6, lines 15-20; node 104 determines neighbors establishment by setting a certain period of time to receive a response to a hello packet transmitted);

reestablishing the routing communication session with a secondary routing control unit of the first router upon failure of the primary routing control unit (see fig.1; col.6, lines 25-35; when the active controller 910 fails, the standby controller 950 of node 104 resumes protocol sessions); wherein the routing communication session is initially reestablished to have a second restart time that is substantially the same as the first retart time (see fig.5; steps 502, 504& col.10, lines 20-30; the switchover from active controller to standby controller so fast such as within a few milli-seconds that peer node 10A does not observe that a switchover has occurred).

Ho et al. does not disclose dynamically renegotiating the second retart time to a third restart time that is less than the first restart time upon identifying the second router as supporting dynamic renegotiation. Dinker et al. discloses a node may dynamically select different timeouts depending on which node failed and/or the type of failure detected (see col.9, lines 15-20) such as when a first primary storage in a node fails, the first lengthly timeout period is initiated (see col.8, lines 57-65).

It is clearly indicated that the different timeouts of Dinker et al. can be renegotiated such that a second timeout is reduced less than the initial timeout. Therefore, it would have been obvious to one skilled in the art to combine the teachings of Dinker et al. with the router 104 of Ho et al. to reestablish routing protocol session to the secondary controller 950 when the primary controller 910 fails. The motivation is applied to transmit multimedia information via routers. Fast switchover will be done in realtime as taught by Ho et al. in abstract.

In claims 9, 21, 40 and 53, the limitations of these claims have been addressed in claim 1.

In claims 15, 47, Ho et al. discloses one or more interface cards receive and send data flows to and from a network (see fig.1, active controller/ active card 910; standby controller/card 950 perfom protocol session with peer nodes 102A and 102B; col.6, lines 20-30).

Claims 4 and 35, Ho et al. discloses wherein each of the first restart time, the second restart time, and the third restart time specify durations of time that the second router is to wait for the first router to reestablish the routing communication session after failure of the routing communication session prior to the second router finding alternative routes that do not utilize the first router (see col.6, lines 25-35; there is a timeout period that peer node 102A repeatly send Hello packets to redundant node 104)

In claims 3, 12, 24, 34, 44, Ho et al. discloses preserving forwarding information in a state of the first router prior to failure of the primary roming control unit (see fig.3, step 306; standby card/controller 950 resumes operation of the current state of active card/controller 910 prior to failure; col.8, lines 32-45); and forwarding traffic in accordance with the preserved forwarding information while reestablishing the routing communication session (see col.24, lines 25-35; in the event of a failureto the active controler 910, router 104 switchovers its operation to standby controller 950 and continues routing traffic because the standby controller generates a valid forwarding table of each routing peotocol).

In claim 13, Ho et al. discloses the secondary routing control unit receives a routing communication having updated routing information from the neighboring network device (see fig.14, step 1404; send updates to stanby; col.20, lines 55-65) , and wherein the secondary routing control unit extracts the updated routing information from the routing communication

and updates the preserved forwarding information based on the routing comrttunication from the neighboring network device (fig.14, step 1408; send message to application in standby; col.20, lines 55-65).

In claims 5, 18, 26, 36, 50 and 51, Ho et al. discloses monitoring the routing session between the primary routing control unit and the second router (see col.5, line 55 to col.6, line 20; nodes 104, 102A, 102B always maintain consistent routing protocol information such as OSPF, IS-IS, BGP).

In claims 6, 19, 25 and 37, Ho et al. discloses receiving information from the second router that identifies one or more routing protocol capabilities supported by the second router (see fig.6, col.10, lines 55-65; peer node 102 and node 104 require transaction update so that routing update must also be made in both active controller, standby controller and peer node 102); and identifying the second router as supporting dynamic regeneration based on the capability information (see fig.4A, col.8, lines 60 to col.9, line 10; protocol information in node 102 and node 104 must be consistent to ensure redundancy).

In claims 2, 11, 23, 33 and 43, Ho et al. does not disclose automatically renegotiating the communication session with the second control unit to change the restart time for the communication from the third restart time back to the first restart time upon recovery of the primary control unit (as described in claim 1, and based on a well-known skills in the art such as OSPF, IS-IS, RIP routing protocol described in Ho et al. the third restart time is automatically renegotiate back to the first restart time when the active controller 910 is recovered).

In claims 16, 46 and 48, Ho et al. discloses a forwarding engine comprising a forwarding component (See fig.4A, col.8, lines 60-67; routing table 403A generates FIB 432).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Aggarwal (US pat. 7,130,304);

Medved et al. (US Pat. 6,751,188 B1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Thursday 8:30 AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hanh Nguyen

HANH NGUYEN
PRIMARY EXAMINER